

IN THE CLAIMS:

Claim 1 (Currently amended) A method comprising the steps of:

heat treating aluminum alloy rivets to increase their shear strength;

sand blasting the heat treated rivets with aluminum oxide;

washing the heat treated rivets with a solution containing chromic acid and a fluorine compound;

applying a coating of a solution of a solvent, a resin binder, strontium chromate and an elasticizer to the heat treated rivets;

curing the coating at a temperature of about 250°F for about one hour ~~between about 230°F and 290°F for a time period of between about one half hour and one and one half hours~~, and maintaining the temperature of the coating and the heat treated rivets below a maximum temperature of about 300°F, to produce a gasket-like coating on the heat treated rivets having a thickness of about 0.0007 to about 0.001 inch; and

riveting two workpieces together with the coating sealing the heat treated rivets, and with the heat treated rivets retaining their full heat-treated shear strength.

Claim 2 (Cancelled)

Claim 3 (Previously presented) A method as defined in claim 1 wherein the solvent is Methyl Ethyl Ketone and Ethyl alcohol, the elasticizer is Polyvinyl Butyral, and the resin is a phenolic resin.

Claim 4 (Currently amended) A method comprising the steps of:

obtaining a supply of aluminum alloy rivets which have been heat treated to increase their shear strength;

sand blasting the heat treated rivets;

washing the heat treated rivets with a solution containing chromic acid and a fluorine compound;

applying a coating of a solution of a solvent, a resin binder, strontium chromate and an elasticizer to the heat treated rivets; and

curing the coating at a temperature of about 250°F for about one hour ~~between about 230°F and 290°F for a time period of between about one half hour and one and one half hours~~, and maintaining the temperature of the coating and the heat treated rivets below a maximum temperature of about 300°F, to produce a gasket-like coating on the heat treated rivets having a thickness of about 0.0007 to about 0.002 inch;

whereby the heat treated rivets retain their full heat treated shear strength, and seal rivet holes when the heat treated rivets are riveted in place.

Claim 5 (Cancelled)

Claim 6 (Previously presented) A method as defined in claim 4 wherein the solvent is Methyl Ethyl Ketone and Ethyl alcohol, the elasticizer is Polyvinyl Butyral, and the resin is a phenolic resin.

Claim 7 (Cancelled)

Claim 8 (Currently amended) A method comprising the steps of:  
heat treating aluminum alloy rivets to increase their shear strength;

washing the rivets with a solution containing chromic acid and a fluorine compound;

applying a coating of a solution of a solvent, a resin binder, a chromate compound and an elasticizer to the heat treated rivets;

curing the coating at a temperature of about 250°F for about one hour ~~between about 230°F and 290°F for a time period of between about one half hour and one and one half hours~~, and maintaining the temperature of the coating and the heat treated rivets below a maximum temperature of about 300°F, to produce a gasket-like coating on the heat treated rivets having a thickness of about 0.0007 to about 0.001 inch; and

riveting two work pieces together with the coating sealing the rivet, and with the heat treated rivets retaining their full heat-treated shear strength.

Claim 9 (Cancelled)

Claim 10 (Previously presented) A method as defined in claim 8 wherein the solvent is Methyl Ethyl Ketone and Ethyl alcohol, the elasticizer is Polyvinyl Butyral, and the resin is a phenolic resin.

Claim 11 (Currently amended) A method comprising the steps of:

obtaining a supply of aluminum alloy rivets which have been heat treated to increase their shear strength;

washing the rivets with a solution containing chromic acid and a fluorine compound;

applying a coating of a solution of a solvent, a resin binder, a corrosion inhibitor, and an elasticizer to the heat treated rivets; and

curing the coating at a temperature of about 250°F for about one hour ~~between about 230°F and 290°F for a time period of between about one half hour and one and one half hours~~, and maintaining the temperature of the coating and the heat treated rivets below a maximum temperature of about 300°F, to produce a gasket-like coating on the heat treated rivets having a thickness of about 0.0007 to about 0.002 inch;

whereby the heat treated rivets retain their full heat treated shear strength, and seal rivet holes when the heat treated rivets are riveted in place.

Claim 12 (Cancelled)

Claim 13 (Original) A method as defined in claim 11 wherein the solvent is Methyl Ethyl Ketone and Ethyl alcohol, the elasticizer is Polyvinyl Butyral, the resin is a phenolic resin, and the corrosion inhibitor is strontium chromate.

Claim 14 (Cancelled)

Claim 15 (Currently amended) A method comprising the steps of:  
obtaining a supply of aluminum alloy rivets which have been heat treated to increase their shear strength;

pre-treating the heat treated rivets with a solution containing chromic acid and a fluorine compound to provide a clean surface free from oxidation or contamination;

applying a coating of a solution of a solvent, a resin binder, a corrosion inhibitor, and an elasticizer to the heat treated rivets; and

curing the coating at a temperature of about 250°F for about one hour ~~between about 230°F and 290°F for a time period of between about one half hour and one and one half hours~~, and maintaining the temperature of the coating and the heat treated rivets

below a maximum temperature of about 300°F, to produce a gasket-like coating on the heat treated rivets having a thickness of about 0.0007 to about 0.002 inch;

whereby the heat treated rivets retain their full heat treated shear strength, and seal the rivet holes when the heat treated rivets are riveted in place.

Claims 16-17 (Cancelled)

Claim 18 (Previously presented) A method as defined in claim 15 wherein the pre-treating involves sand blasting the rivets.

Claim 19 (Cancelled)